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ABSTRACT

This report provides a summarization of a study designed to determine if there is a significant relationship between formal religious education and the moral judgment development of college students, and after controlling for formal religious education, to see if there was also a significant relationship between the educational environment or certain selected students characteristics and the moral judgment development of those students. The final data base contained 226 randomly selected college and divinity school students, enrolled at 12 fully accredited, randomly selected institutions from 11 states located throughout the United States. After controlling for ethics courses completed, the type of school attended, and the affiliation of some institutions, 8 of 15 selected student characteristics were related significantly to the moral judgment development of students. Divinity school students had significantly higher levels of moral development than liberal arts college students. Also, students attending Roman Catholic and Southern Baptist institutions had significantly lower levels of moral development than students attending nonaffiliated institutions. Conversely, the moral development of students attending Jewish and United Methodist institutions did not differ significantly from the moral development of students attending nonaffiliated institutions. The eight significantly related student characteristics were gender, ethnic group, highest degree held, year of study, mother's education level, father's education level, religious ideology regarding moral decisions, and individual denominational membership. Contains 38 references. (GLR)

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FORMAL MORAL EDUCATION AND INDIVIDUAL MORAL DEVELOPMENT

By

GARY GENE FRIEND

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University of Florida, Gainesville, FL 32611
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Preface

The Institute of Higher Education at the University of Florida has sponsored research related to higher education for more than twenty years. This is, however, the first research conducted here that focused upon the problems colleges face in developing curriculum that is related to the topic of teaching ethics.

Dr. Friend has probed in a successful manner the major question that always must be asked: Can a college teach ethics in such a way as to affect the attitude of an individual? The answer he has developed in this study will provide curriculum planners with specific food for thought.

We present this monograph to encourage that thought. We are indebted to those who assisted Dr. Friend in the development of this study. We provide the monograph in recognition of their own personal values and commitments.

November, 1991

James L. Wattenbarger, Director
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Executive Summary

This monograph is a summarization of this author's most recent research study (Friend 1991). The purpose of the study was to determine if there is a significant relationship between formal religious education and the moral judgment development of college students, and, after controlling for formal religious education, to see if there is also a significant relationship between the educational environment or certain selected student characteristics and the moral judgment development of those students. Formal religious education was defined as the study of Judeo-Christian philosophy, theology, or ethics at a fully accredited college or divinity school. Educational environment was defined as the type of school attended and the Judeo-Christian denominational affiliation of the school.

A correlational design was used, and data were gathered through two instruments: a one-page demographics, educational background, religious ideology, and moral values background questionnaire designed by the researcher; and the

Defining Issues Test (DIT) designed by James Rest. DIT P scores were used as the measure of moral development. The final data base contained 226 randomly selected college and divinity school students, enrolled at 12 fully accredited, randomly selected institutions from 11 states located throughout the United States.

The number of ethics courses completed was related significantly to the moral judgment development of liberal arts college students; however, this relationship was not significant for divinity school students. Judeo-Christian philosophy or theology courses completed were not related significantly to student moral development.

After controlling for ethics courses completed, the type of school attended, the affiliation of some institutions, and 8 of 15 selected student characteristics were related significantly to the moral judgment development of students. Divinity school students had significantly higher levels of moral development than liberal arts college students. Students attending Roman Catholic and Southern Baptist institutions had significantly lower levels of moral development than students attending nonaffiliated

institutions. Conversely, the moral development of students attending Jewish and United Methodist institutions did not differ significantly from the moral development of students attending nonaffiliated institutions. The eight significantly related student characteristics were gender, ethnic group, highest degree held, year of study, mother's education level, father's education level, religious ideology regarding moral decisions, and individual denominational membership.

Background

Required courses in moral philosophy that directly addressed ethical issues disappeared from college curricula in the early twentieth century (Rudolph, 1962, 1977). There has been a recent resurgence of support for reintroducing ethics courses into American college curricula, in nearly all academic disciplines (Baca & Stein, 1983). This renewed support has been reinforced by recent scandals in athletics, business, education, government, medicine, and religion. (Barrett, 1987; Bowen, 1987; Koepp, 1987; Shapiro, 1987; Stengel, 1987).

Is there a universal ethical standard for human behavior? From the earliest time there has been sharp disagreement on the answer to this question. Plato (c.350/1937) postulated that there was a transcendent universal standard of justice. George E. Moore (1903) postulated that there was no universal standard. This disagreement over the existence of a universal ethical standard has not been settled. Nevertheless, each person ultimately develops a standard for individual ethical conduct. To believe there is no universal standard means individual ethical conduct adheres to an individually determined standard of ethics; on the other hand, to believe there is a universal standard still means the application of that standard is individually determined, and once again individual ethical conduct adheres to an individually determined standard of ethics. Either way there is an ethical standard that is followed. If that standard is adhered to by most human beings in a society, it becomes, at the very least, a universal standard for that society.

For the Judeo-Christian society, the ethical standard is prescribed by two biblical principles. These

principles are: (a) "Hear, O Israel, the Lord Our God is One Lord, and you shall Love the Lord your God with all your heart, and with all your soul, and with all your strength" (Snaith, 1978, p.287); and (b) "You shall love your neighbor as yourself" (Snaith, 1978, p. 187). These principles set the standard for Judeo-Christian living and are interpreted into an individual concept of morality and justice using examples such as Moses and Jesus Christ as the hermeneutic for that interpretation, and the golden rule as the instruction for application. In the final analysis, however, the moral belief of individuals can be determined only by their feelings concerning how they ought to treat others and how others ought to treat them, not by what they do, because belief does not always result in practice (Aland, Black, Martini, Metzger & Wikgren, 1975; Rest, 1986b).

Can moral judgment be developed? Lawrence Kohlberg and James Rest, two of the most notable researchers in the field of moral development, concluded from their research that moral judgment can be developed, and that this development continues well into adulthood (Colby, Kohlberg,

Gibbs, and Lieberman, 1983; Rest, 1979, 1986b). If it is concluded that moral judgment can be developed, how can a society properly influence individual moral belief in a way that will result in adherence to a socially acceptable ethical standard, and that eventually will result in socially acceptable individual behavior? Several prominent researchers over a number of years have concluded that formal higher education, in general, has a significant impact on the moral development of college students (Chickering, 1969; Astin, 1978; Bowen, 1980; Rest, 1986b). Though no one yet has determined what specific aspects of higher education increase individual moral judgment development, Lockwood (1978), Lawrence (1980), and Leming (1981) conducted reviews of moral education programs that indicated that certain types of moral education programs are effective in increasing moral judgment development while others are not. The consensus of opinion from those studies was that the moral education programs that were effective were those that lasted longer than a few weeks, and involved the participation of the students in controversial moral dilemmas. In a meta-analysis of 55

studies, where the Defining Issues Test was used as the measure of moral judgment development, Schlaefli, Rest, and Thoma (1985) concluded that the overall effect of moral education programs is statistically significant when they are considered collectively without regard to type of program. This conclusion seems to go beyond the conclusions reached by Lockwood, Lawrence, and Leming and suggests that moral education is effective in increasing individual moral judgment development, regardless of the length of the program or the method of instruction that is used to teach the program.

Moreover, some individuals have indicated that formal religious education has a definite role to play in moral development. On the other hand, others have indicated that formal religious education has no definite role to play. This continuing controversy can be seen in the literature of James Michael Lee (1980) and Lawrence Kohlberg (1967, 1981). In addition, Rest (1986b) indicated that, although there have been numerous studies that contribute to the conclusion that higher education has a positive effect on the moral development of students, there has been very

little research that has investigated the relationship of formal religious education to the moral judgment development of college students. This research was conducted in order to address this controversy and definitively determine if there is a significant relationship between formal religious education and moral judgment development.

Assumptions

It was assumed, for the purposes of this study, that there is a universal ethical standard that sets forth the proper way for human beings to relate to one another with regard to such things as truth and justice (Kohlberg, 1981; Nisan & Kohlberg, 1982, Piaget, 1932/1965; Plato c.350/1937; Rest, 1986b). Second, it was assumed that each individual is capable of formulating and living ethical values that are oriented toward increasingly higher stages of moral development, as defined by Kohlberg, and that the movement to those higher stages continues throughout life (Colby, et al., 1983; Piaget, 1932/1965; Rest, Davison & Robbins, 1978; Rest, 1979, 1986b). Third, it was assumed that individuals in their college years are highly receptive

to moral judgment development (Biggs & Barnett, 1981; Colby et al., 1983; Rest, 1986a, 1986b). Finally, it was assumed that moral judgment development can be measured in a manner that is quantifiable (Davison & Robbins, 1978; Kohlberg, 1981, 1983, 1984; Rest 1979, 1986a, 1986b).

Research Questions

To accomplish the purpose of this study, delineated in the Executive Summary, the researcher examined specific formal religious education courses, different types of higher education institutions with varied religious affiliations, and a number of selected student characteristics across a wide range of educational environments. The following research questions were posed:

1. Primary research question: Is there a significant relationship between formal religious education and the moral judgment development of college students, based on the number and type of formal religious education courses completed?

2. Secondary research question: After controlling for any significantly related formal religious education

courses, is there a significant relationship between the educational environment and the moral judgment development of college students?

3. Tertiary research question: After controlling for any significantly related formal religious education courses, is there a significant relationship between certain selected student characteristics and the moral judgment development of college students?

Delimitations

This study was restricted to an evaluation of the moral judgment development of college and divinity school students who were receiving formal religious education that teaches primarily the Judeo-Christian ethic. However, the intent was to examine the full spectrum of that teaching in a number of varied educational environments at higher education institutions located throughout the United States.

Limitations

This study examined only Judeo-Christian formal religious education. Although this decision was made by

design, it does limit the generalization of the results to other religious and ethical systems.

The denominationally affiliated colleges and divinity schools that were used in this study represented only the four largest Judeo-Christian denominations in the United States. Although this decision also was made by design, it does limit the generalization of the results to other denominations.

Design

The research design used in this investigation was a correlational design. The definition of formal religious education, the random selection of the educational environments, and the selection of the variables to be evaluated were all under the direct control of the researcher. The random selection of the students, and the content of the specific religious education courses were both controlled by the individual institutions.

Sample

The study sample consisted of 226 randomly selected

college and divinity school students from 12 randomly selected institutions located in Alabama, California, Connecticut, Florida, Georgia, Indiana, Missouri, New York, North Carolina, Ohio, and Pennsylvania. Of the 226 students, 116 were liberal arts college students and 110 were divinity school students. Furthermore, 150 were male students, 76 were female students, 127 were between the ages of 17 and 24, and 90 were between the ages of 25 and 50+. Nine of the students did not report their age. Of the 12 institutions, 5 were colleges and 7 were divinity schools. Of the 5 colleges, 1 was Jewish, 1 was Roman Catholic, 1 was Southern Baptist, and 2 were Colleges of Arts and Sciences from nonaffiliated state universities. Of the 7 divinity schools, 4 were Roman Catholic, 1 was Jewish, 1 was United Methodist, and 1 was interdenominational nonsectarian. The validity of the sample was strengthened by the fact that the respondents were from fully accredited institutions located throughout the United States, that each returned DIT was required to pass four separate internal checks on respondent reliability before being used in the study, and that the DIT P score mean for study respondents was 44.58, which was

virtually identical to the DIT P score mean of 44.02 for the same mix, undergraduates and graduates, reported by James Rest (1986a) in his standardization sample.

Instrumentation

The Defining Issues Test (DIT) was used as the measurement instrument because, as Rest (1986a) indicated, it is the most widely used measure of moral judgment, and it is the best documented in terms of reliability and validity. The six-story version of the DIT was used in this study and the DIT P score, which is a percentile index of the relative importance an individual attaches to the principled morality or Kohlberg's Stage 5 and Stage 6 items on the DIT, was the index used to measure the moral judgment development of individual respondents.

The one-page questionnaire that accompanied the DIT was designed by this researcher (Friend, 1991). The questionnaire solicited information concerning 15 selected items of demographic, educational background, religious ideology, and moral values background information. The responses were evaluated with regard to their relationship

to DIT P scores, using the linear regression equations described in the Data Analysis Section.

Data Collection

Institutions would not supply names and addresses of students; however, the presidents of the 12 participating institutions agreed to have a representative of their school randomly select students, distribute research packets, and then collect the completed packets and return them, in bulk, to this researcher. A cover letter explaining the distribution and collection of the research questionnaires was sent to each institution with the research packets. Each packet was numbered for control purposes. Follow-up contacts were made with those representatives who did not return packets as requested.

Data Analysis

The DIT raw data were processed and, as recommended by Rest (1986a), protocols were discarded for those students whose DIT responses failed any of four internal checks on subject reliability. The Scoring Program for the DIT

(Robbins, Swanson, & Thoma, 1976) provided DIT P scores for use with the questionnaire data in all subsequent regression analyses. Regression analyses were performed on all variables using a general purpose regression procedure. These regression analyses were completed in three phases using the Statistical Analysis System (SAS Institute, 1985).

Phase 1 sought to answer the primary research question and evaluated the relationship of student DIT P scores to the number of Judeo-Christian philosophy, theology, or ethics courses completed. Phase 2 sought to answer the secondary research question and, after controlling for significantly related formal religious education courses, evaluated the relationship of student DIT P scores to the type of school attended and the affiliation of like types of schools. Phase 3 sought to answer the tertiary research question and, after controlling for significantly related formal religious education courses, evaluated the relationship of student DIT P scores to age, gender, ethnic group, highest degree held, year of study, grade point average, parents' annual income, mother's education level, father's education level, familiarity with

Kohlberg's moral development theory, individual religious conversion experience, church/synagogue attendance, religious ideology regarding moral decisions, source of basic moral values, and individual denominational membership.

Since ethics courses were the only courses that showed a significant relationship to the moral judgment development of college students during the Phase 1 analysis, they were the only courses controlled for in Phase 2 and Phase 3. All hypotheses were tested at the alpha level of .05. All categorical variables were dummy coded with 1 and 0. In all linear regression equations the categories represented by X components were the ones that were coded 1. The category not represented by an X component was the one coded 0, that was used for comparison with the other X components. The following linear regression equations were used for hypothesis evaluation in the phases indicated:

1. Phase 1, Hypothesis 1: $Y = B_0 + B_1X_1 + E$, where Y was DIT P scores, and X_1 was the number of Judeo-Christian philosophy, theology, or ethics courses completed.

2. Phase 2, Hypothesis 2: $Y = B_0 + B_1X_1 + B_2X_2 + E$, where

Y was DIT P scores, X_1 was the number of ethics courses completed, and X_2 was divinity schools. Supplemental Analysis: $Y=B_0+B_1X_1+E$, where Y was DIT P scores for either college or divinity school students, and X_1 was the number of ethics courses completed.

3. Phase 2, Hypothesis 3: $Y=B_0+B_1X_1+B_2X_2+B_3X_3+B_4X_4+E$, where Y was DIT P scores for either college or divinity school students, X_1 was the number of ethics courses completed, X_2 was Roman Catholic affiliation, X_3 was Jewish affiliation, and X_4 was Southern Baptist affiliation for colleges or United Methodist affiliation for divinity schools.

4. Phase 3, Hypothesis 4: $Y=B_0+B_1X_1+B_2X_2+E$, where Y was DIT P scores; X_1 was the number of ethics courses completed; and X_2 was age, male gender, year of study, grade point average, parents' annual income, individuals who were familiar with Kohlberg's moral development theory, or individuals who had experienced religious conversion.

5. Phase 3 Hypothesis 5: $Y=B_0+B_1X_1+B_2X_2+B_3X_3+E$, where Y was DIT P scores; X_1 was the number of ethics courses completed; X_2 was mothers who were college graduates,

fathers who were college graduates, or individuals who believed they should follow established religious rules and biblical commandments in making all moral decisions; and X_3 was mothers with postbaccalaureate degrees, fathers with postbaccalaureate degrees, or individuals who believed they should follow the leadership of the Spirit of God in making all moral decisions.

6. Phase 3, Hypothesis 6: $Y=B_0+B_1X_1+B_2X_2+B_3X_3+B_4X_4+E$, where Y was DIT P scores, X_1 was the number of ethics courses completed, X_2 was individuals who went to church/synagogue regularly seeking values or direction for their life, X_3 was individuals who went to church/synagogue regularly out of duty or habit, and X_4 was individuals who did not go to church/synagogue regularly.

7. Phase 3, Hypothesis 7: $Y=B_0+B_1X_1+B_2X_2+B_3X_3+B_4X_4+B_5X_5+E$, where Y was DIT P scores; X_1 was the number of ethics courses completed; X_2 was Asian-Americans, individuals who had completed an Associate degree, or individuals who felt their basic moral values had come mainly from friends; X_3 was Black-Americans, individuals who had completed a Baccalaureate degree, or individuals who

felt their basic moral values had come mainly from teachers; X_4 was Hispanic-Americans, individuals who had completed a Master degree, or individuals who felt their basic moral values had come mainly from ministers; and X_5 was Native Americans, individuals who had completed a Doctorate degree, or individuals who felt their basic moral values had come mainly from sources other than those specified.

8. Phase 3, Hypothesis 8: $Y = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5 + B_6X_6 + B_7X_7 + B_8X_8 + B_9X_9 + B_{10}X_{10} + E$, where Y was DIT P scores, X_1 was the number of ethics courses completed, X_2 was Roman Catholic, X_3 was Southern Baptist, X_4 was United Methodist, X_5 was Episcopalian, X_6 was Presbyterian, X_7 was American/Independent Baptist, X_8 was United Church of Christ/Christian Church/Fundamentalist/Reformed, X_9 was Unitarian/Quaker/Mennonite, and X_{10} was no denominational membership.

Hypotheses, Findings, Conclusions, and Implications

Of the eight student characteristics that were related significantly to moral development, gender, ethnic group, mother's education level, and father's education

level are variables not under the direct control of the student. Highest degree held, year of study, religious ideology regarding moral decisions, and denominational membership are variables under the student's direct control. Moreover, this direct control includes selection of the type of school, the affiliation of the school, and the number of ethics courses completed; variables that also are related significantly to student moral development.

The general conclusion is that the majority of significantly related independent variables are variables that can be controlled directly by the student. The general implication is that students have substantial direct control over their own moral development. Of course with a correlational design and survey data, it cannot be determined for certain whether the significant relationships are due to increases in student moral development prompted by individual independent variables, or to pre-existent higher levels of student moral development.

The following is a discussion of the specific findings, conclusions and implications for each of the eight study hypotheses:

1. Hypothesis 1: There is no difference, based on the number and type of formal religious education courses completed, in the DIT P scores of college students.

Finding: There was not a significant relationship between Judeo-Christian philosophy courses completed or theology courses completed and student DIT P scores. There was a significant relationship between ethics courses completed and student DIT P scores. The computer model indicated that students averaged 1.75 points higher on their DIT P scores for each ethics course completed. The probability of values greater than $|T|$ for this independent variable was .007. For that reason, Hypothesis 1 was rejected.

The conclusion is that the completion of certain types of formal religious education courses significantly increases the moral judgment development of college students. The more ethics courses completed, the higher the individual level of moral development. Because of the confounding effect of number of ethics courses completed and school type that was identified during the Hypothesis 2 data analysis, a supplemental analysis was performed in Phase 2 of the study, during the Hypothesis 2 analysis. This

supplemental analysis indicated that there was a significant relationship between the number of ethics courses completed and the moral judgment development of students attending colleges of liberal arts and sciences. The computer model indicated that liberal arts college students averaged 2.93 points higher on their DIT P scores for each ethics course completed. The probability of values greater than $|T|$ for this independent variable was .0185. However, the supplemental analysis also indicated that the relationship between number of ethics courses completed and the moral judgment development of students attending divinity schools was not significant.

The implication is that undergraduate college students who complete college ethics courses will increase significantly in their level of moral development, making more moral judgments at the Stage 5 and Stage 6 levels on the Kohlberg moral development scale for each ethics course completed. Students probably reach a point of diminishing return, where additional ethics courses do not provide any additionally significant increase in moral development; however, that point was not determined by this study. The

confounding effect that was present in this study also suggests that the effect of number of ethics courses completed is not present for divinity school students. The findings for Hypothesis 1, Hypothesis 2, and the Hypothesis 2 supplemental analysis, suggest that students who choose to attend divinity schools are in higher levels of moral development prior to their attendance at those schools. These findings also suggest that divinity school students complete more ethics courses than liberal arts college students, although they could complete some or all of those courses at the undergraduate level prior to their attendance at the divinity school. Of the liberal arts college students used in this study 51.7% had completed no ethics courses, while only 32.7% of the divinity school students had completed no ethics courses. Of the divinity school students used in this study 30.0% had completed 1 ethics course, and 37.9% of liberal arts college students had completed 1 ethics course. Only 10.4% of liberal arts college students had completed more than 1 ethics course, while 37.3% of divinity school students had completed more than 1 ethics course. Only 6.0% of liberal arts college

students had completed 2 ethics courses, while 23.6% of divinity school students had completed 2 ethics courses. Only 4.4% of liberal arts college students had completed 3 to 6 ethics courses, while 11.7% of divinity school students had completed 3 to 6 ethics courses. No liberal arts college student had completed more than 6 ethics courses, while 1.0% of divinity school students had completed 8 ethics courses and 1.0% of divinity school students had completed 10 ethics courses.

2. Hypothesis 2: After controlling for ethics courses completed, there is no difference, based on school type, in the DIT P scores of college students. Finding: There was a significant difference, based on school type, in the DIT P scores of college students. The computer model indicated that divinity school students averaged 5.5 points higher on their DIT P scores than students attending liberal arts colleges. The probability of values greater than $|T|$ for this independent variable was .0038. For that reason, Hypothesis 2 was rejected.

The conclusion is that, even after controlling for the number of ethics courses completed, divinity school

students have significantly higher levels of moral development than liberal arts college students. The discussion of the conclusion and implication for Hypothesis 1 must be considered in conjunction with this conclusion before drawing any implication for this hypothesis.

The implication is that type of school attended may significantly affect individual moral development, with divinity school students developing more rapidly and making more moral judgments at the Stage 5 and Stage 6 levels on the Kohlberg moral development scale than liberal arts college students. However, there also is the possibility that individuals who choose to attend divinity schools are more prone to be in significantly higher levels of moral development prior to making that choice. As discussed previously in the Hypothesis 1 implication, the confounding effect between the number of ethics courses completed and school type, suggests the additional possibility that college students who choose to attend divinity schools also complete more ethics courses than other college students. The finding that divinity school students had significantly higher DIT P scores than liberal arts college students was

not unexpected, due to the fact that education has one of the most consistent relations to the DIT (Rest, 1986a), and the fact that nearly all of the divinity school students had completed baccalaureate degrees prior to their divinity school attendance.

3. Hypothesis 3: After controlling for ethics courses completed, there is no difference, based on school affiliation, in the DIT P scores of college students attending the same type of school. Finding: There was not a significant difference, based on school affiliation, between the DIT P scores of students attending the Jewish affiliated college and the DIT P scores of students attending the nonaffiliated colleges. There was a significant difference between the DIT P scores of students attending the Roman Catholic affiliated college or the Southern Baptist affiliated college, and the DIT P scores of students attending the nonaffiliated colleges. The computer model indicated that students attending the Roman Catholic affiliated college averaged 8.59 points lower on their DIT P scores than students attending the nonaffiliated colleges. The probability of values greater than $|T|$ for this

independent variable was .0104. The computer model also indicated that students attending the Southern Baptist affiliated college averaged 11.22 points lower on their DIT P scores than students attending the nonaffiliated colleges. The probability of values greater than $|T|$ for this independent variable was .004. There was not a significant difference, based on school affiliation, between the DIT P scores of students attending the Jewish divinity school or the United Methodist divinity school and the DIT P scores of students attending the nonsectarian divinity school. There was a significant difference between the DIT P scores of students attending the Roman Catholic divinity schools and the DIT P scores of students attending the nonsectarian divinity school. The computer model indicated that students attending Roman Catholic divinity schools averaged 8.77 points lower on their DIT P scores than students attending the nonsectarian divinity school. The probability of values greater than $|T|$ for this independent variable was .013. For those reasons, Hypothesis 3 was rejected.

The conclusion is that, even after controlling for the number of ethics courses completed, students attending

Roman Catholic colleges and Southern Baptist colleges have significantly lower levels of moral development than students attending Jewish and religiously nonaffiliated colleges. In addition, even after controlling for the number of ethics courses completed, students attending Roman Catholic divinity schools have significantly lower levels of moral development than students attending nonsectarian divinity schools.

The implication is that school affiliation may significantly affect individual moral development, with students who are attending nonaffiliated colleges and nonsectarian divinity schools developing more rapidly and making more decisions at the Kohlberg Stage 5 and Stage 6 levels of moral development than students who are attending Roman Catholic colleges, Southern Baptist colleges, and Roman Catholic divinity schools. However, there also is the possibility that individuals who are at the lower stages of development on Kohlberg's moral development scale are more prone to select Roman Catholic colleges, Southern Baptist colleges, and Roman Catholic divinity schools; whereas, those who are at the higher stages of development are more

prone to select nonaffiliated colleges and nonsectarian divinity schools. This selection may be due, at least in part, to individual denominational membership, which also was significantly related to individual moral development. Denominational membership will be discussed later.

4. Hypothesis 4: After controlling for ethics courses completed, there is no difference, based on age, gender, year of study, grade point average, parents' annual income, familiarity with Kohlberg's moral development theory, or individual religious conversion experience, in the DIT P scores of college students. Finding: There was not a significant difference in the DIT P scores of college students based on age, grade point average, parents' annual income, familiarity with Kohlberg's moral development theory, or individual religious conversion experience. There was a significant difference in the DIT P scores of college students based on gender and year of study. The computer model indicated that males averaged 7.53 points lower on their DIT P scores than females. The probability of values greater than $|T|$ for this independent variable was .0001. The computer model also indicated that students

averaged 2.41 points higher on their DIT P scores for each completed year of study. The probability of values greater than $|T|$ for this independent variable was .0001. For those reasons, Hypothesis 4 was rejected.

The conclusion is that, even after controlling for the number of ethics courses completed, female college students have significantly higher levels of moral development than male college students. Furthermore, even after controlling for the number of ethics courses completed, college students have significantly higher levels of moral development for each additional year of college education completed.

The implication is that gender may significantly affect the moral development of students, with females developing more rapidly and making significantly more moral judgments at Kohlberg's Stage 5 and Stage 6 levels than males; and that each year of college education significantly increases the moral development of students, and the number of moral judgments they make at Kohlberg's Stage 5 and Stage 6 levels. However, as Rest (1986a) suggested, there also is the possibility that significant differences in male/female

DIT P scores are due to intelligence quotients, education, or socio-economic status. The gender differences were unexpected because Rest (1979) listed only 2 of 22 studies that reported significant male/female differences, Rest (1986b) said gender differences with regard to moral development are trivial, and Gilligan (1982) said that Kohlberg style justice oriented moral judgment scoring systems downgrade women and make women's moral development appear inferior to men's. With regard to year of study, the finding was not unexpected, because Rest (1986a) indicated that education has one of the most consistent relations to the DIT, and just receiving more education of any kind at the college level significantly increases DIT P scores.

5. Hypothesis 5: After controlling for ethics courses completed, there is no difference, based on mother's education level, father's education level, or student's religious ideology regarding moral decisions, in the DIT P scores of college students. Finding: There was not a significant difference between the DIT P scores of students whose mothers had completed a postbaccalaureate degree, and the DIT P scores of students whose mothers had not completed

a college degree. There was a significant difference between the DIT P scores of students whose mothers had completed a baccalaureate degree, and the DIT P scores of students whose mothers had not completed a college degree. The computer model indicated that students whose mothers had completed a baccalaureate degree averaged 4.19 points higher on their DIT P scores than students whose mothers had not completed a college degree. The probability of values greater than $|T|$ for this independent variable was .0474. There was not a significant difference between the DIT P scores of students whose fathers had completed a baccalaureate degree, and the DIT P scores of students whose fathers had not completed a college degree. There was a significant difference between the DIT P scores of students whose fathers had completed a postbaccalaureate degree, and the DIT P scores of students whose fathers had not completed a college degree. The computer model indicated that students whose fathers had completed a postbaccalaureate degree averaged 6.75 points higher on their DIT P scores than students whose fathers had not completed a college degree. The probability of values greater than $|T|$ for this

independent variable was .0042. There was not a significant difference between the DIT P scores of students who believed they should follow the leadership of the Spirit of God in making all moral decisions, and the DIT P scores of students who believed they should follow their own moral reasoning in making all moral decisions. There was a significant difference between the DIT P scores of students who believed they should follow established religious rules and biblical commandments in making all moral decisions, and the DIT P scores of students who believed they should follow their own moral reasoning in making all moral decisions. The computer model indicated that students whose ideology was to follow established religious rules and biblical commandments averaged 5.41 points lower on their DIT P scores than students whose ideology was to follow their own moral reasoning. The probability of values greater than $|T|$ for this independent variable was .0252. For those reasons, Hypothesis 5 was rejected.

The conclusion is that, even after controlling for the number of ethics courses completed, students whose mothers have completed a baccalaureate degree have

significantly higher levels of moral development than students whose mothers do not have a college degree. In addition, even after controlling for the number of ethics courses completed, students whose fathers have completed a postbaccalaureate degree have significantly higher levels of moral development than students whose fathers do not have a college degree. Moreover, even after controlling for the number of ethics courses completed, students who believe they should follow established religious rules and biblical commandments in making all moral decisions have significantly lower levels of moral development than students who believe they should follow their own moral reasoning in making all moral decisions.

The implication is that mothers with baccalaureate degrees and fathers with postbaccalaureate degrees help to increase their children's level of moral development, in some way contributing significantly to their children's movement into the Kohlberg Stage 5 and Stage 6 levels of moral development; and that religious ideology significantly affects individual moral development, with students who hold the ideology of following their own moral reasoning

developing more rapidly and making more moral decisions at the Kohlberg Stage 5 and Stage 6 levels than students who hold the ideology of following established religious rules and biblical commandments. With regard to mother's and father's education level, it is reasonable to expect that if college education increases moral development, college educated parents will teach higher moral values to their children and assist in moving them into a higher level of moral development than that of their peers whose parents are not college educated. It also is reasonable to expect that those students who feel they should follow established religious rules and biblical commandments in making all moral decisions would not choose Kohlberg Stage 5 and Stage 6 responses, since the lower stage answers would fit their religious ideology more closely with regard to moral decisions. In addition, as Rest (1986b) indicated, their religious ideology also would tend to retard their movement into Kohlberg's higher stages of moral development.

6. Hypothesis 6: After controlling for ethics courses completed, there is no difference, based on church/synagogue attendance, in the DIT P scores of college students.

Finding: There was not a significant difference between the DIT P scores of students who attended church/synagogue regularly or nonregularly, and the DIT P scores of students who never attended church/synagogue. For that reason, Hypothesis 6 was not rejected.

The conclusion is that, even after controlling for the number of ethics courses completed, church/synagogue attendance does not have a significant relationship to the moral development of college students. Moreover, nonattendance at church/synagogue does not have a significant relationship to the moral development of college students.

The implication is that church/synagogue attendance or nonattendance does not significantly affect the moral development of college students, and the number of moral judgments they make at the Stage 5 and Stage 6 levels on the Kohlberg scale. This suggests that either ethics are not being taught effectively at churches and synagogues, or students attending churches and synagogues are not learning anything that would cause their moral development to be different from students who are not attending.

7. Hypothesis 7: After controlling for ethics courses completed, there is no difference, based on ethnic group, highest degree held, or source of basic moral values, in the DIT P scores of college students. Finding: There was not a significant difference between the DIT P scores of students who indicated that friends, teachers, ministers, or another specified source was the main source of their basic moral values, and the DIT P scores of students who indicated their family was the main source of their basic moral values. There was not a significant difference between the DIT P scores of Black, Hispanic, and Native American students and the DIT P scores of White students. There was a significant difference between the DIT P scores of Asian-American students and the DIT P scores of White students. The computer model indicated that Asian-American students averaged 14.88 points lower on their DIT P scores than White students. The probability of values greater than $|T|$ for this independent variable was 0.0098. There was not a significant difference between the DIT P scores of students who had completed an associate degree or a doctorate degree, and the DIT P scores of students who had not completed a

college degree. There was a significant difference between the DIT P scores of students who had completed a baccalaureate degree or a master degree, and the DIT P scores of students who had not completed a college degree. The computer model indicated that students who had completed baccalaureate degrees averaged 8.25 points higher on their DIT P scores than students who had not completed a college degree. The probability of values greater than $|T|$ for this independent variable was 0.0002. The computer model also indicated that students who had completed master degrees averaged 12.80 points higher on their DIT P scores than students who had not completed a college degree. The probability of values greater than $|T|$ for this independent variable was 0.0001. For those reasons, Hypothesis 7 was rejected.

The conclusion is that, even after controlling for the number of ethics courses completed, Asian-American students have significantly lower levels of moral development than White students. Even after controlling for the number of ethics courses completed, individuals who have completed baccalaureate degrees and master degrees have

significantly higher levels of moral development than those who have not completed a college degree.

The implication is that the Asian-American culture significantly affects individual moral development, and/or follows a different moral standard than the White-American culture, with Asian-American students making less moral judgments at the Stage 5 and Stage 6 levels on Kohlberg's moral development scale than White students. Moreover, the amount of higher education completed, from the bachelor's level through the master's level, significantly affects individual moral development, increasing the number of moral judgments made at the Stage 5 and Stage 6 levels on Kohlberg's moral development scale; whereas, education below or above those levels does not significantly affect moral judgment development. The nonsignificance at the doctorate level could be due to the fact that there was only one respondent in that category, though it does merit further investigation.

8. Hypothesis 8: After controlling for ethics courses completed, there is no difference, based on individual denominational membership, in the DIT P scores of college

students. Finding: There was not a significant difference between the DIT P scores of students who were Episcopalians, Presbyterians, members of the United Church of Christ/Christian/Fundamentalist/Reformed denominations, or members of the Unitarian/Quaker/Mennonite denominations, and the DIT P scores of students who were Jewish. There was a significant difference between the DIT P scores of students who were Roman Catholics, Southern Baptists, United Methodists, American/Independent Baptists, or members of no denomination, and the DIT P scores of students who were Jewish. The computer model indicated that Roman Catholic students averaged 15.23 points lower on their DIT P scores than Jewish students. The probability of values greater than $|T|$ for this independent variable was .0004. The computer model indicated that Southern Baptist students averaged 21.48 points lower on their DIT P scores than Jewish students. The probability of values greater than $|T|$ for this independent variable was .0001. The computer model indicated that United Methodist students averaged 10.16 points lower on their DIT P scores than Jewish students. The probability of values greater than $|T|$ for this

independent variable was .0491. The computer model indicated that American/Independent Baptists averaged 18.95 points lower on their DIT P scores than Jewish students. The probability of values greater than $|T|$ for this independent variable was .0038. The computer model also indicated that students who did not belong to any denomination averaged 15.59 points lower on their DIT P scores than Jewish students. The probability of values greater than $|T|$ for this independent variable was .0312. For those reasons, Hypothesis 8 was rejected.

The conclusion is that, even after controlling for the number of ethics courses completed, Roman Catholics, Southern Baptists, United Methodists, American/Independent Baptists, and individuals claiming no denominational membership have significantly lower levels of moral development than Jewish individuals.

The implication is that denominational membership significantly affects individual moral development, with Jewish students developing more rapidly and making more moral judgments at the Kohlberg Stage 5 and Stage 6 levels of moral development than Roman Catholic, Southern Baptist,

United Methodist, or American/Independent Baptist students. This significant difference in moral development could be due to the more conservative teachings of particular Christian denominations, or the multifarious nature of the Jewish religion, or a combination of both.

Suggested Future Studies

In order to reinforce the findings of this study and seek answers to the questions raised by those findings six future investigations were recommended (Friend, 1991). The two most important of those recommended studies are a replication study to see if the primary findings of this study can be replicated, and a behavioral change study to see if this increase in individual moral judgment development, which is significantly related to ethics courses completed at the college level, also results in significantly higher levels of ethical behavior.

Recommendations

The findings of this study indicate that teaching individuals to think critically about ethics and ethical

issues significantly increases their level of moral development. They also indicate that the early founders of American colleges were correct in including moral philosophy courses as a required part of college curricula. Moreover, this study strongly supports the contention by Bok (1988) that all colleges ought to include more ethics courses as part of the core curriculum in each discipline, and practical discussions of ethical issues in the other classes taught in each particular discipline. This author agrees with Bok that college presidents, deans, and faculty need to fulfill their responsibility, to both students and higher education, by ensuring that more ethics courses and more ethical discussions are incorporated into college curricula. Therefore, the following recommendations are made:

1. Each institution of higher education should include a general ethics course as part of the required core curriculum in each major discipline.

2. Each department, at each institution of higher education, should include at least one applied ethics course as a required part of the curriculum in that major field, and specifically designed to explore ethical issues in that major.

3. Discussions of ethical issues should be incorporated into as many nonethics courses as practical, within all major fields of study, at each institution of higher education.

4. All students should take full responsibility for those independent variables that were identified as significantly related to their moral development and under their direct control.

It is reasonable to expect that the increase in individual moral development related to the study of ethics at the college level would have direct relevance to each major career field, in a number of areas. Moreover, it also is reasonable to expect that the implementation of these four recommendations would be beneficial to both college students and society at large, during the students' college years and upon their entry into the career work force following graduation. Therefore, the presidents, faculty, and students of all institutions of higher education should duly consider the content of this study, and begin now to hear the voices of prominent higher education leaders like Derek Bok.

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